## ABSTRACT of the DISCLOSURE.

10

The cyclone separator with flow rate regulation is for separating solid particles from a fluid, especially in dental apparatus. The separator comprises a recipient having an inlet for the fluid and an upper outlet for the fluid once the solid particles have been removed therefrom. The separator also comprises a recycling conduit which places an outlet conduit in communication with the inlet, a three-way valve to an inlet of which the outlet conduit is connected, and to outlets of which the recycling conduit and the outlet are connected. The three-way valve has an obturator which can block the connection between the outlet conduit and the recycling conduit, a one-way valve which has an obturator and is located at the outlet downstream of the three-way valve. The one-way valve is normally closed and can connect the outlet conduit with the outlet. The three-way valve and the one-way valve are brought into action when the fluid pressure in outlet from the separator reaches first and second predetermined values.